1B920

000027722

ENGINEERING-SCIENCE, INC.
1700 Broadway, Suite 900 Denver, Colorado 80290
phone: (303) 831-8100 • telecopy (303) 831-8208

MEETING NOTES

TO: Distribution **DATE:** April 12, 1994

FROM: Philip Nixon **PROJECT:** Solar Pond IM/IRA

MEMO #: SP307:041494:02

ATTENDANCE:

Steve Howard, DOE/SMS
Phil Nixon, ES
Lee Pivonka, G&M
Harlen Ainscough, CDH
Shaleigh Whitesell, PRC
Richard Henry, ES
Andy Ledford, EG&G
Harry Heidkamp, ES
Ned Krohn, ES
Rick Millikin, ES
Mark Austin, EG&G

DISTRIBUTION:

Dave Ericson, EG&G
L. Benson, ES
A. Conklin, ES
K. Cutter, ES
S. Stenseng, ES
A. Fricke, ES
T. Kuykendall, ES
T. Evans, ES
B. Cropper, ES
C. Montes, ES
R. McConn, ES
W. Edmonson, ES
B. Wallace EG&G (Admin. Record) (2)
S. Hughes, ES
K. London, EG&G
Jesse Roberson, DOE
Helen Belencan, DOE
John Evans, ES
Scott Surovchak, DOE
John Haasbeek, ERM
Randy Ogg, EG&G
Arturo Duran, EPA
Cindy Gee, ES
Steve Hughes, ES
Dave Myers, ES
Steve Cooke, EG&G
Joe Schieffelin, CDH
Dave Myers, ES
S. Winston, ES
Kim Ruger, EG&G
Michelle McKee, EG&G
Marcia Dibiasi, IGO
Rich Stegen, ES
Bob Siegrist, LATO
Kevin Loos, DOE
Frazer Lockhart, DOE
Toni Moore, EG&G
Will Barnard, ES
Alan McGregor, ERM
Ted Kearns, DOE/KMI
Pat Breen, ES
Peg Witherill, DOE
Steve Keith, EG&G
John Rampe, DOE
John Hicks, ES
John Evans, ES
Steve Paris, EG&G
Bob Glenn, ES
Rick Wilkinson, ES
Ron Schmiermund, ES
Marc Hill, ES
Alan MacGregor, ERM
Central Files

SUBJECT: Weekly Status Meeting

(I:\PROJECTS\722446\CORRESP\04149402.WPF\04/14/94)

1.) Summary of items discussed at a conference call on April 8, 1994.

Phil Nixon provided for team ratification the decisions reached during a conference call on April 8, 1994 involving EG&G, CDH, EPA, ES, and ERM.

The first question posed was did ES need to incorporate upgradient and downgradient ground water quality in the IM/IRA modeling to address a cumulative impact to ground water? It was agreed that the contaminant contribution from the Solar Evaporation Pond (SEP) source could be assessed independently of the upgradient and downgradient ground water quality. Therefore, the SEPs could be modeled as the only source of contaminants and it will be assumed the upgradient and downgradient ground water is clean. Harlen Ainscough indicated that this strategy was regulatorily correct.

The second issue for ratification addressed the application of a 1000-year or RCRA-engineered cover. It was agreed that a 1000-year cover in conjunction with a subsurface drain would be required if any hazardous waste was consolidated beneath the engineered cover at concentrations exceeding the Preliminary Remediation Goals (PRGs). If all hazardous waste had concentrations below the PRGs then a RCRA engineered cover would be appropriate.

The selected engineered cover will be designed to be protective of human health and the environment. This is the most important criteria to achieve irrespective of whether a 1000-year or RCRA-compliant engineered cover is selected.

Harlen Ainscough indicated that the ARAR discussion in Part IV of the IM/IRA-EA decision document caused him to study the "contained-in policy" and memos previously submitted to DOE concerning the 881 Hillside project. Review of this regulatory information leads Harlen to question whether the contaminated OU4 soils should be considered "hazardous waste" or "contaminated media." If the soils are considered "hazardous waste," then the Colorado Hazardous Waste Landfill Siting criteria would apply. This could result in the requirement for the 1000-year engineered cover design. It was also questioned whether the establishment of a Corrective Action Management Unit (CAMU) would negate the siting requirements, because a CAMU does not legally constitute disposal. It was pointed out that the CAMU was originally proposed to alleviate land disposal restriction (LDR) issues. **Harlen Ainscough will investigate this issue further with his colleagues at CDH.**

2.) Appropriate ground water comparison criteria for calculating/comparing COCs/PRGs for ground water protection.

Harlen Ainscough specified that the Water Quality Control Commission considers that the ground water ultimately discharges to surface water. Therefore, the most stringent standard would be aquatic criteria for surface water. Phil Nixon pointed out that the point of compliance (POC) is a long ways from the nearest surface water. Therefore, aquatic criteria are not appropriate for the POC. Harlen also indicated that full protectiveness of ground water will be addressed after Phase II in the Record of Decision (ROD). Therefore, it is only appropriate for the Phase II program to consider the surface water and impacts to aquatic life **Harlen Ainscough will establish a meeting with his colleagues at CDH to discuss this issue.]**

Amy Conklin suggested that a forward Risk Assessment could be conducted following the Risk Assessment Guidance (Part C) to see if the proposed closure alternative would exceed a $1.0x10x^{-6}$ risk level. Harlen Ainscough pointed out that a safe concentration could be calculated that was still above the State Standards. Pat Breen specified that in this case, an alternate concentration limit (ACL) could be requested within the IM/IRA for the particular contaminants that are determined to be safe at concentrations that are higher than the ground water protection standards. It was discussed that this forward risk assessment would not address the protection of aquatic life because the assessment would focus on human health based on the same exposure scenario that was previously used to calculate soil PRGs. It was agreed that ES would hold on performing the forward risk calculations until Harlen Ainscough met with his CDH counterparts to resolve the issue.

3.) Building 788 Waste Disposition

Harlen Ainscough stated that CDH agreed that the Building 788 waste could be considered remediation waste. However, the CDH Corrective Action Management Unit (CAMU) regulations state that consolidating wastes within a CAMU must enhance the unit or remedial action. Therefore, DOE needs to demonstrate to CDH/EPA that the inclusion of Building 788 waste beneath the engineered cover will enhance the closure/remedial effort. **A meeting will be established between DOE and CDH/EPA to discuss this issue.**

Harlen Ainscough also stated that the closure of RCRA units 48 and 21 needs to be a separate activity distinct from the management of the waste materials. Therefore, CDH has requested that closure of RCRA Units 48 and 21 be certified as closed separately from the SEP closure certification. Harlen indicated that CDH considered clean closure to mean that each piece of process equipment (and the building shell) would be decontaminated and released for onsite disposal as low-level radioactive waste. Rich Stegen indicated that ES considers removal of the building from the site as clean closure because the RCRA designed materials would be removed for disposal. This is analogous

to the clean closure proposed for SEP 207-C. In addition, the site where Building 788 was located will be remediated and verified as clean closed.

Harlen Ainscough relayed some concerns that Arturo Duran had conveyed. ES will evaluate the following areas of the IM/IRA-EA decision document to ensure it meets the RCRA closure requirements:

- Specify separate closure certification of Units 48 and 21.
- Add appropriate sampling and analysis discussion (as required).
- Justify how disposing the wastes enhances the remedial action.

4.) Open Issues

Mark Austin asked whether the utilities/debris would require sampling prior to being consolidated under the engineered cover. It was agreed that if a RCRA engineered cover were installed, then sampling would be required. If a 1000-year engineered cover were installed, then sampling would not be required.

It was agreed that ground water would not have to be remediated to concentrations lower than background concentrations upgradient from the site.

Philip A. Nixon

Attachment 1
Page 1 of 1

TEAM MEETING

April 12, 1994

Agenda

Summary of Items Discussed at a Conference Call on April 8, 1994

- Isolation of the SEPs from Upgradient/Downgradient ground water

- Performance Criteria for meeting the Part II requirements

Appropriate Ground Water Comparison Criteria for the calculation of COCs/PRGs for ground water protection

Building 788 Waste Disposition

ALTERNATIVES ASSESSMENT FOR INCLUSION OF BUILDING 788 (RCRA UNIT 21), RCRA UNIT 48, AND ANCILLARY EQUIPMENT INTO THE OU4 IM/IRA

April 12, 1994

Parsons Environmental Services
Engineering-Science, Inc.

Building 788 Briefing — April 12, 1994
EG&G - Rocky Flats Plant

Background

- It has been established in the resolution signed by DOE, CDH, and EPA that Building 788 will be removed as part of the IM/IRA.
- This alternatives analysis was performed to consider closure (RCRA Units 21 and 48), waste management, and potential reuse options for Building 788 material and equipment.
- The selected alternative will be incorporated into the appropriate OU4 IM/IRA sections.

Parsons Environmental Services
Engineering-Science, Inc.

Attachment 3
May 24, 21

Regulatory Factors

- Units 21 and 48 currently have RCRA interim status and are therefore subject to regulation under Part 265 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). Unit 21 is subject to Part 265.178, and Unit 48 is subject to Part 265.197.

- Building 788 (including Units 21 and 48) were included in the OU4 IM/IRA. Part V of the OU4 IM/IRA annotated outline contained in the resolution states "...This section will describe work needed to close the two RCRA units in Building 788, decontaminate the structure if necessary, and demolish the structure..."

- DOE, EPA, and CDH have directed that Building 788 be dismantled and managed as a component of the OU4 IM/IRA. In accordance with Paragraph 36 of the IAG "interim measure shall refer to the RCRA term for corrective actions, generally of short term, and may be taken at any time during the RFI/CMS (RCRA Facility Investigation/Corrective Measure Study) process, to respond to immediate threats, such as actual or potential exposure to hazardous waste or constituents."

Attachment B
Page 30 of 21